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AUTHOR Manly, Theron W.
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ABSTRACT

Educators need a better understanding of the change process if changes are to be well planned and effective. The purpose of this study was to identify procedures that had facilitated educational change in selected school systems. The changes studied were in the areas of curriculum organization and content, instructional technology, staffing, school organization, and building design. The researcher looked at school systems identified as having made a change in a desirable direction. Data were collected through tape recorded interviews with superintendents, assistant superintendents, teachers, principals, supervisors, project directors, and lay persons involved. A descriptive interpretation of the information isolated procedures for facilitating educational change. The findings led to several conclusions: (1) Changes in school systems are initiated near the top level of system organization. (2) The leadership of the superintendent of schools is a major factor. (3) Federal financial support to local school systems promotes educational change. (4) When federal funds are used, there is less need for community support. (5) Regardless of type of change made, schools use many of the same procedures for facilitating change. (6) Many of the same procedures are used both for improving attitudes of teachers toward the change and for increasing teachers' knowledge. (7) Educational consultants facilitate education change. (Author/JM)

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# IDENTIFICATION OF PROCEDURES USED TO FACILITATE EDUCATIONAL CHANGE IN SELECTED ALABAMA SCHOOL SYSTEMS

by
THERON W. MANLY

THE ALABAMA STATE DEPARTMENT OF EDUCATION
MONTGOMERY
June, 1972

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## FOREWORD

Local school systems are making many changes in our State. A concentrated effort by local, state and federal educators has produced many of the needed improvements in Alabama's schools. This publication contains the results of a study of some of the changes in selected Alabama school systems. The intent of this publication is to give local education agencies a better knowledge of procedures used to facilitate educational change.

The State Department of Education, through Titles I and III of the Elementary and Secondary Education Act and other programs, assisted local school systems in making these changes. We gratefully acknowledge the efforts that local school systems are making to bring about educational change in our State.

LeRoy Brown
State Superintendent of Education

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Appreciation is also extended to the six Alabama school systems in which this study was conducted.

Theron W. Manly

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# I. INTRODUCTION

Educators agree that planned educational change is needed if better schools are to be developed. Change has occurred in our educational system; yet, this change has not always been well planned. A study of the change process, of the barriers to change and procedures used to facilitate change would help educators in their planning process.

American schools have changed greatly, and if they are to continue to meet needs reasonably well, they must change in many other ways during the coming years. Otto and Sanders (1964) considered the curriculum of American schools to be in a constant state of flux. In fact, they feel that change is the most prevailing characteristic of curriculum.

Bain (1971) pointed out that the classroom today must prepare our young people for the world of tomorrow. To do this, education must change. She suggested sound, sensible innovation, new teaching materials and institutional arrangements.

Morphet, Johns and Reller (1963) recognized that a good educational program does not just happen. It must be carefully planned and continuously revised if it is to meet the needs of American youth. Orr (1969) pointed out that too many of the major decisions concerning education result from chance rather than planning.

Educational change has occurred and continues to occur. Graham (1970) pointed out that secondary school curriculum and teaching methods have changed drastically. Kimbrough (1965) indicated we are now

discussing vast new educational frontiers in curriculum organization and content, instructional technology, staffing, school organization, and building design. Doll (1964) looked at change as an unalterable fact of human existence. He felt that man has no control over some of the influences that can create change and that he has direct control of other influences. He concluded that what man does with the influences he can control makes a real difference in the quality of his living.

A study of the change process in relation to education is sorely needed. Educators have generally been slow to make educational changes. Many educators are not familiar with the change process. Miles (1964) pointed out that massive sums are being spent to develop innovations but there is a minor role allocated for the examination of, planning for, and sophisticated execution of change processes. Lionberger (1965) observed that the rate at which changes are taking place are occurring much more quickly and that a better understanding of the processes and conditions involved in these rapid changes could provide clues for enhancing quick adoption of a similar nature elsewhere.

Barriers to educational change exist and have been identified. The Joint Committee on Curriculum of the Department of Supervisors and Directors of Instruction and the Society for Curriculum Study (1937) identified several barriers to educational change. The barriers identified by the Joint Committee include a rigid course of study, grades, promotion practices, marking systems, authoritative administration and separation of the school and community.

Carlson (1965) pointed out three major barriers to change: (1) the absence of a change agent, (2) a weak knowledge base, and (3) domestication of the public schools.

Clemmons (1971) identified seven categories reported in the literature as the most frequently cited barriers to effective educational change. The categories identified were:

1. Finance
2. Restrictive Laws, Policies, and Regulations
3. Attitudes, Professional Personnel, and Leadership
4. Organization
5. Knowledge
6. Facilities and Materials
7. Environment [pp. 17-18].

Procedures for facilitating change need to be identified so that barriers to change may be overcome or avoided. Clemmons (1971) pointed out that in the past, most studies of change have looked at how it happens, not how to make it happen. Bennis (1969) pointed out that more often than not, change agents fail to report their strategy or to make it explicit. Miles (1964) suggested that we need to know why innovations spread rapidly or slowly, what produces resistance to changes in educational systems, why particular strategies of change succeed or fail. By understanding more, it is possible that we may be able to manage and direct change. Studies of successful change situations could possibly provide clues to be used in facilitating more rapid adoptions or adaptations elsewhere.

## Purpose of the Study

The purpose of this study was to identify procedures that have been used to facilitate educational change in selected school systems where change had occurred. Specifically, it was the purpose to identify procedures used to facilitate change in (1) curriculum organization and content, (2) instructional technology, (3) staffing, (4) school organization, and (5) building design. By identifying such procedures educators might overcome or avoid certain barriers to change.

## II. REVIEW OF RELATED LITERATURE

The primary purpose of this section was to review the literature of significant procedures used to facilitate educational change. Subsidiary purposes were to review pertinent literature on the nature of change and the characteristics of the change process in education.

### The Nature of Change

Debate of the question of the inevitability of change has almost ceased. Bennis, Benne and Chin (1969) indicated that we are beyond debating the inevitability of change; most students of change agree that the one major invariant is the tendency toward movement, growth, and development in the change process. The present debate has swung from change versus no change to the methods of directing and controlling forces in change. The question we confront is the methods or procedures to be used to effect change.

#### Definition and Levels of Change

One cannot discuss the nature of change without first defining what is meant by the term. According to Chin (1967) planned change is defined as a deliberate and collaborative process involving change agent and client systems. These systems are brought together to solve a problem or more generally to attain an improved state of functioning in the client system by utilizing and applying valid knowledge.

Chin (1967) identified five levels or definitions of change. These definitions and illustrations of the definitions are:

1. Substitution - The simplest form of change is one where one element is merely substituting for another element already present. As in the case of the new and improved models of cars, people often look forward to substituting a 1966 model of a textbook or new media of communications for the old.

2. Alteration - Some material is attached in a textbook hoping that the change will appear minor and thus be readily adopted.

3. Perturbations and Variations - Changes in the performance of a given client system sometimes lead only to temporary shifts in the system, but not to a change in the structure of the system itself. From a long-range point of view, such changes are temporary oscillations in the relationships. Thus a sociological theorist would consider changes of this sort not enduring or system changes, but merely variations in and around the equilibrium of a system.

4. Restructuring - Changes which lead to modifications and reorganizations of the structure of the system are more fundamental. Change of this order is basic social change.

5. Value Orientation Change - What we call change--depends upon the frame of reference within which it is viewed and defined. [pp. 334-335].

## Stages of Planned Change

It is generally recognized that managed change proceeds through several distinct stages from beginning to end. Lewin (1962) suggested a change cycle consisting of unfreezing of present situation, moving to a new condition, and refreezing or stabilizing the changed situation.

Lippitt (1958) advocated a change cycle encompassing the development of a need for change (unfreezing), establishment of a change relationship, working toward change (moving), generalization and stabilization of change (freezing), and achieving terminal relationship.

Jenkins (1949) identified general steps which must be taken if the desired change is to be effectuated in a client system, and he classified these as analyzing the present situation, determining the changes which are required, making the changes indicated by the analysis

of the situation, and stabilizing the new situation so that it will be maintained.

The basic ingredients of the change process include the recognition of the need for change, applying an appropriate treatment to the situation to cause the change and stabilizing the results of change.

Various scholars have catalogued the change process in different ways, but most interpretations specify four basic phases. Rubin (1968) identified these phases as research, development, dissemination and installation. The research phase is a phase in which worthwhile things are invented, either out of fresh insights or new combinations of old ingredients. The development phase is the phase in which the products of research are packaged into operational procedures, tested in the field, modified, and made ready for dissemination. In the dissemination phase the developed programs are popularized through activities such as articles in professional journals, interpersonal communication and site visitations. The installation phase is one in which the innovation is introduced into the school program.

## Change Agent and Client System

In a managed change process an outside agent is usually involved which is referred to as a "change agent" and the population with which it works is called a "client system."

According to Hall (1971) the change agent may be a practitioner who is able to open up channels of communications that were previously closed between two persons, or a highly organized professional organization working with a large industrial complex on changes in personnel

organization in order to increase production and profits. A change agent may be an individual, small group, institution, organization or community. A professional change agent may be a teacher, psychiatrist, psychologist, social worker, human relations expert, a marriage counselor, public administration consultant, community-council organizer, or university, depending upon the type of client system in which a change is being induced.

## Change Theories and Principles

Included in the writings of the behavioral sciences are two basic theories of change: Lewin's (1962) force field theory of change and McGregor's (1962) theory of an existence of a hierarchy of needs from a lower to a higher order. Both theories can be used to partially explain the nature of change.

Lewin (1962) maintained that any quasi-stationary situation is attained as a result of an equilibrium between the forces pushing in one direction and the forces pushing in the opposite direction. To bring about change, it is necessary to effect disequilibrium. This may be done by reducing or removing forces, strengthening or adding forces, or changing the direction of forces.

McGregor's (1962) theory of change is associated with the needs of human beings. He believed that there is an existence of a hierarchy of needs from lower to higher order and indicated that higher order needs cannot be met until lower order needs are reasonably satisfied.

Using Lewin's model for thinking about change, Benne and Birnbaum (1969) formulated the following principles for effecting institutional change:

1. To change a subsystem or any part of a subsystem, relevant aspects of the environment must also be changed.

2. To change behavior on any one level of a hierarchical organization, it is necessary to achieve complementary and reinforcing changes on organization levels above and below that level.

3. The place to begin change is at those points on the system where some stress and strain exist. Stress may give rise to dissatisfaction with the status quo and thus may become a motivating factor for change in the system.

4. In diagnosing the possibility of change in a given institution, it is always necessary to assess the degree of stress and strain at points where change is sought. One should ordinarily avoid beginning change at the point of greatest stress.

5. If thoroughgoing changes in a hierarchical structure are desirable or necessary, change should ordinarily start with the policy-making body.

6. Both the formal and the informal organization of an institution must be considered in planning any process of change.

7. The effectiveness of a planned change is often directly related to the degree to which members at all levels of an institutional hierarchy take part in the fact-finding and the diagnosing of needed changes and in the formulating and reality-testing of goals and programs of change [pp. 330-334].

According to Chin (1963) there are some principles of change and of changing that will hold true. They are:

1. The tempo of actual change always will be slower than (a) our sense of urgency to alter conditions as new problems come to light or are forcibly raised to crisis proportions by pressures not to be denied, and (b) the available supply of good ideas, especially those proven to be workable in their prototype form and evaluated as effective in accomplishing a goal.

2. Different institutions in our society will show different rates of change. Comparative evaluations of the rate of change of such institutions as family, education, medicine, religion, and industry indicate that sources of change can be built into institutional arrangements.

3. With the emergence of mass culture, mass society - accompanied by loss of community and personal relationships and the

increased availability of mass communications and channels of influence and persuasion - the basis for influencing one another, institutions, and the process of change has shifted. What formerly was based on community of interests now rests upon diverse and multifavious interests.

4. The acceptance and/or nonacceptance of change in new social and educative technology will be explained best as a function of several large classes of variables: (a) proven quality of the innovation, (b) available information about innovation and the source of information, (c) nature of the relationship between the induced source of change and the persons who are being helped to change, with special attention to the power relationships of the two, (d) attitudes, cognitions, self-perceptions of the individuals involved, and (e) personal, interpersonal, and organizational relationships of the person and his significance to others.

5. An ever-increasing number of minds is trying out ideas, conceptualizing efforts at change, evaluating strategies, and forging new social inventions [pp. 327-329].

The professional literature relating to change includes numerous proposals relating to change strategies. Howsman (1967) pointed out that there is much semantic looseness among educators where change is concerned.

In an attempt to focus on the problem of semantic looseness, Chin (1967) suggested three basic strategies for effecting deliberate or planned change. The first strategy (rational-empirical) is one in which attempts to effect change are based on reason and demonstration. In this approach the need is made clearly visible and understandable, and the value of suggested change is demonstrated. The second strategy (normative-reeducative) is one in which deliberate efforts are made to help people who will be affected by a proposed change to modify or change their attitudes. In the third strategy (power-coercive) a desired change is brought about through the imposition of power. Each of these strategies is illustrative of an alternative way in which meaningful change might be brought about.

Morphet, Jesser and Ludka (1971) pointed out that inherent in the three strategies outlined by Chin are the following basic concepts relating to change:

1. Overall effectiveness in attaining established goals or changes is closely related to the understanding of the need for, together with acceptance of, the established goal or goals.

2. Educational change is "people-oriented" rather than "thing-oriented" and people have to be considered and involved.

3. Change can be achieved through the imposition or application of power or pressure [pp. 126-127].

## Educational Change

American education has changed greatly. Frymier (1969), in comparing schools today with those of twenty years ago stated:

> Even a cursory view of schools today compared to those of twenty years ago suggests that there has been a considerable change in the field of education. First of all, school buildings have changed. They are bigger, lighter, more colorful, and have more varied facilities and equipment than schools ever had before. In terms of program, there have been many changes, too. Curriculum offerings are both broader and deeper. More courses in mathematics, science, foreign language, literature, industrial arts, vocational education, and physical education are evident. It has been estimated that more than fifty per cent of the high school students studying physics in the United States today are involved in PSSC physics programs, thousands are utilizing the BSCS programs in biology, and an estimated hundreds of thousands of students from elementary school through college participate in programs employing educational television. And none of these programs existed before 1950 [p. 18].

## Understanding the Change Process

An understanding of why changes are taking place in the public schools, the process of change and factors that inhibit or facilitate educational change is essential for educators today if planned change is

to occur. Lionberger (1965) pointed out that those who have observed the rate at which changes are occurring in educational systems are aware that adoptions are taking place much more quickly than in the past and at an incredibly fast pace.

Miller (1967) recognized that interest in the change process is not by any means new, but contemporary interest is at an all-time high and going up. He listed these reasons for high interest in the process of change:

1. The increasing gap between what we know about good educational theory and what is happening in our school
2. The so-called knowledge explosion
3. The increasing complexity of decision-making has forced attention to be placed upon its processes
4. The rediscovered importance of education to national welfare and progress [pp. 19-20].

According to Miles (1964) a variety of innovations are being advocated, adopted, and occasionally evaluated. He indicates that there is an accompanying lack of attention to the change process itself and sees this as an area for improvements.

## Recognition of the Need for Change in Education

The initial step of a managed change in a client system is the examination of the present state of affairs. This may be done by the change agent through some type of survey or by a self-study conducted formally or informally by client system. There must be an identification and isolation of the problems of client system so a managed change can be planned and executed.

Two of the key questions which should be asked during this analysis are: (1) "What are the sources of difficulty?" and (2) "What are the

forces preventing the changes from occurring?" One must recognize that there are usually present in each client system two types of forces which are referred to as "driving or changing forces" and "restraining forces." The former are those which tend to initiate a change and keep it going while the latter only prevent or retard movement toward change.

Jenkins (1949) in his illustration of engineering a change from teacher-centered method of teaching to teacher-pupil planning method in a school setting cited the following examples of possible driving and restraining forces present in an educational client system:

> Driving forces: (a) a generally progressive philosophy of education may be accepted by a large number of teachers; (b) the teachers want to train students in the ways of living as citizens in a democracy; (c) the pupils desire some freedom in making decisions.
> Restraining forces: (a) many teachers lack training and skill in methods of planning cooperatively with pupils; (b) learning the present methods and experimenting with the "unknown" makes teachers like anyone else, feel insecure; (c) criticism may be directed against the school by the more conservative parents; (d) pupils have little skill in planning together [pp. 37-38].

Trump (1963) concluded that restraining forces exist in educational institutions and should be carefully appraised when initiating educational changes. He said:

> Teachers feel deep emotional attachment to their personal responsibility for pupils' learning outcomes. Thus, they hesitate to allow instructional technology, teacher assistants or other teachers to come between them and their students.... Training and habit accustom teachers to certain patterns of teaching and evaluating, so they hesitate to change their methods, or the size of student groups they confront, for fear of personal "inadequacy" of,... the fear that their students may learn less.... Some teachers are psychologically reinforced by security of the self-contained classroom.... Teachers bear heavy work loads.... Those who propose change must not add to this work load if they expect sustained interest on the part of teachers.... Parents and their children feel reasonably secure in today's schools. Parents understand most school practices since those practices have remained quite constant.... Taxpayers are interested only in tax reduction....

> They tend to resist educational change because their experience is that changes cost additional money [pp. 121-123].

According to Hall (1971) one must also recognize in a scholastic client system that the administrator can be either a driving force and/or a restraining force. School administrators generally are anxious to present to the public a smoothly run organization which has come about by systematizing and stabilizing as much of their jobs as possible. Therefore, they may be hesitant to initiate or support changes which will damage this image regardless of how worthy they may be. In such cases, the administrators serve as restraining forces. However, some administrators may be pointedly interested in changes which will improve their image and will use their influence to get these implemented in which case they become driving forces.

In addition to driving and restraining forces in a client system, there may be present the third force, which is referred to as interference. This is not an opposing force, but a competing one. The client system would like to make the change, but there is present something which is more important. For example, a proposal to build a new school was defeated, not because of opposition to the need for the school, but because of the need for an expressway between the inner city and suburbia for commuting workers was more pressing. Lippitt (1958) indicated that interference is most likely to be a problem in cases where the client system has inadequate time, money, or energy.

All types of forces in a client system must be catalogued and examined in terms of their magnitude and classification so appropriate action can be selected to bring about the desired change. This action may be the increasing of driving forces, or the decreasing of the restraining forces, or both.

According to Hall (1971) a client system may determine the need for planned change in one of several ways. An individual who is in physical pain seeks a physician, a change agent, to cause a change in his feelings. A corporation whose production efficiency is far below a competitive concern may be forced to employ an unbiased time and motion organization to improve its operation in order to remain in business. A school system may be dissatisfied with the adaptability of the curriculum of its schools to the employment needs of its young population and, as a consequence, may seek advice from local employers concerning the educational needs of their employees. A university located in an economically depressed area of a city, upon recognizing the inability of residents of the area to succeed in school, may establish skill development centers to effectuate changes in the study habits of the local population. A school system may ask a change agent, in this case, a local church group to make contact with parents concerning the out-of-school behavior of its students.

The need for change may originate with the client system, or may be recognized by an outside agency, or may be stimulated by the third agent. Nevertheless, the need for change arises out of some kind of difficulty in which the client system finds itself, and this difficulty must be recognized and identified.

## Some Difficulties of a Client System

Hall (1971) indicated that the need for change in a client system may be due to a faulty power structure, improper use of internal energy, ineffective communication system, and improper relationship of client system with environment. These are by no means the only sources of

difficulty in a client system, but probably are by far the ones which appear most frequently. The base of power may be so structured that the concentration of power is at one or two centers and no avenues are provided for input of authority at other points. A change agent probably could activate a change that would create a broader base of authority in terms of representation and remove this difficulty.

Hall (1971) pointed out that the non-productive use of energies of sub-parts of a client system such as the displacement of energies in irrelevant activities and the investment of energies in negative producing efforts can create confusion and conflict. A good example of this is the great dissatisfaction, found among teachers, due to the many perfunctory activities in which they must engage that do not relate directly to the learning process in children such as selling and collecting tickets at football games, collecting lunch money, and filling out a multitude of forms. Educational systems are beginning to witness teachers seeking change agents, such as organized labor and professional organizations, to help alleviate this difficulty. Many times a sub-part of a client system is fully aware of its difficulty, but the client system itself may not possess the machinery or techniques for the sub-part to make its wishes known to all parts of the client system. Even though its intentions are probably good, they cannot be communicated effectively because of ineffective communication techniques of client system. Sometimes, inefficiency in upward and downward communication in a hierarchical organization is the key to problems.

Hall (1971) indicated that the relationship between the client system and its environment must be realistic, if the system wishes to avoid difficulty. Often there exists a discrepancy between the environ-

ment, as it really exists and as it is perceived by the client system, or vice versa. If the client system isolates itself from its environment and is incapable of or refuses to understand messages coming from its environment, or vice versa, there is a need for a change, Most laymen would agree that education in America today is faced with this dilemma. It is in this context that one also must keep in mind the fact that anxiety, frustration and feelings of insecurity in the client system will be sources of difficulty, and that these deterrent forces must be dealt with positively.

## Establishing a Relationship

When establishing a relationship between the change agent and the client system, special effort must be put forth to see to it that this relationship is a healthy one and that it has the necessary ingredients for success. According to Hall (1971) it makes no difference what type of change agent is to be used; initially, the client system must demonstrate its readiness to establish a rapport with such a change agent, and must have the feeling that the agent has the necessary relevancy and competency to cause desired change. The change agent cannot expect to force its wishes on the client system and expect a welcome reception. Neither can the client system expect the change agent to be responsible totally for the change. There must be mutual respect and acceptance by both parties, if the change is to materialize.

The initial contact of change agent with the client system should be a wholesome one, and it must convey the idea that the agent's motives are meritorious. All questions concerning why the change agent wants to help must be answered positively and clearly. The change agent should

attempt to introduce changes under positive conditions and try to avoid early failures. A realistic time schedule should be established which will provide ample time for the desired change to take place.

From the outset, the change agent must be aware of the fact that there may be a particular individual or a group of individuals within the client system, because of vested interest and the threat which proposed change will cause, who will serve to destroy the relationship between the agent and the client system.

The relationship between the change agent and the administrator in an educational client system should be one which will promote desired change. Taylor (1971) speaks to this subject by saying that the administrator plays a major role in producing constructive change. He establishes a positive climate for change without which a model would not be able to operate. The administrator, while effective in establishing a climate favorable to change, should not take the role of a change agent. When the administrator tries to move in and out of the role of a change agent, it results in role conflict. Change agents may be from inside or outside the system, but should be someone other than the administrator.

## Rationale for Educational Change

According to Kimbrough (1965) vast new educational frontiers are being discussed in curriculum organization and content, instructional technology, staffing, school organization and building design. Recognizing that all changes in these areas could not be reviewed, a rationale for educational change is presented.

There is scientific evidence to justify the basic educational changes made in recent years. Morphet, Johns and Reller (1963) listed

these factors as reasons for educational change:

1. Studies have provided many additional insights into the learning process

2. Emphasis is placed on scientific research and the application of scientific methods and findings rather than on tradition and subjective judgment

3. Studies have shown that how people learn may be as important or in some cases even more important than what they learn

4. The most meaningful improvements in the educational program are being effected on the basis of cooperative study and agreement [pp. 300-301].

In describing the reasons for educational change, Anderson (1956) discussed five factors and conditions that affect the educational program. They are:

1. Almost every significant change that occurs in civilization has some impact on the program

2. Notable discoveries and significant advances are constantly being made in all sciences and all of these discoveries have many implications for the educational program

3. Studies have resulted in much new information regarding growth and development of children and the learning process

4. As a result of such developments, the conceptions of the people regarding goals and purposes of education have changed in a number of respects

5. Changes in the organization, administration, and financing of education have resulted in improvements in the educational program [pp. 104-105].

In describing the reasons for change at the secondary level Trump (1967) felt that the desire of educators to overcome the three "t's" would cause secondary education to change. The three "t's" are "togetherness," "terminableness," and "tightness." Togetherness describes the group activity in the schools, terminableness describes the prescribed amount of course work in a prescribed time, and tightness

describes the schedule of the school day.

Among the reasons for educational change identified by Miller (1967) for the 1955-66 period were the following:

1. Supreme Court rulings on desegregation
2. Federal programs for the gifted and culturally deprived
3. An unprecedented Federal Aid Bill in 1965
4. Substantial assistance to vocational education
5. Considerably liberalized provisions under the National Defense Education Act (NDEA)
6. Programs such as Operation Headstart, team teaching, nongradedness, teaching about communism, foreign language in the elementary school
7. Major curriculum studies in physics, mathematics, biological sciences, and other subjects
8. Educational television
9. Programmed learning and teaching machines [pp. 1-2].

## Factors Fostering Educational Change

According to Miller (1967) there are general values beneath the surface of change but quite fundamental to change. He identified these general values as the belief of the American people in the democratic way, a belief in equality as a fundamental American value, a belief that material progress had been a profound influence on change in our national life, and a belief in the importance of education as a condition underlying the pragmatic and progressive nature of American education.

Frymier (1969) concluded that social change affects educational change. The fact that there are more people, there is more knowledge, and there are conflicting and threatening ideologies with Communist countries are reasons that will cause education to change.

Specific factors contributing to educational change were identified by Miller (1967) as the National Defense Education Act (NDEA); the phenomenal growth of the knowledge industry; pressures from outside the realm of professional education and advances in behavioral sciences. Frymier (1969) saw the expansion of the federal involvement, the accelera-

tion of the social revolution, the increased interest of the public in the school system, and the increase in the activities of extremists as factors fostering educational change. He summarized these factors as the tremendous increase in involvement of the federal government in educational affairs, in areas such as the National Defense Education Act of 1958 and the Elementary and Secondary Education Act of 1965. The social revolution in the United States has had an effect on education. People are more genuinely interested in education today and demonstrate this by writing letters to newspapers, discussing educational problems, voting on school levies and becoming involved with others who are interested in education. The impact that the extremists have had on education has usually been limited but effective in that educators frequently adopt their point of view to avoid criticism.

Pellegrin (1966) identified ten sources of educational innovation. These were:

1. The classroom teacher
2. The administrator (principal and superintendent)
3. The school board
4. The lay public
5. The state departments of education
6. Education faculties in colleges and universities
7. Professional associations
8. The United States Office of Education and other federal government agencies
9. Textbook publishers
10. Scientists, technical specialists, and other experts [pp. 6-14].

According to Pellegrin (1966) many, if not most, of the recent improvements in the public schools have come about because of demands from the greater society rather than because of pressures generated within a local school district or a state. The major impetus for change comes from outside the organization. The emphasis on pre-school education, modern foreign languages, new mathematics, and most other recent

major changes have not been initiated by local schools.

Using the sources of change identified by Pellegrin, McPhee (1967) identified the roles to be played by the sources of change in implementing change. Concerning the role of the teacher he said:

> As a source of innovation the classroom teacher seldom plays a major role. In most cases the influence of a given teacher does not range far beyond his classroom, and very rarely does it reach beyond his own school. The teacher generally must confine his efforts at improvement to his own classroom practices [p. 187].

Bricknell (1961) contended that the classroom teachers can make only three types of instructional change in the absence of administrative initiative. He listed these three types of changes as follows:

1. Change in classroom practice
2. Relocation of existing curriculum content
3. Introduction of single special courses at the high school level [p. 24].

According to McPhee (1967) there can be no doubt about the fact that the key element in planning and effecting improvement in local school districts is the administration. The superintendent is the crucial figure in a district basis, and the principal plays a somewhat similar role in the school building. The importance of the superintendent is clearly derived from the power-real or perceived-of his position. He has the power to allocate resources and carries with it the ability to encourage or to stifle the change.

Miller (1967) pointed out that the administration does have a key role in the change process. If the administrator frowns upon the change effort, or is passive in his support, its chances of success are minimal.

Local boards of education play an important role in the process of change. McPhee (1967) pointed out that local boards, largely through their influence, control the distribution of resources. The major

contribution of school boards is the initial provision of resources to do the jobs which are agreed upon as necessary.

Morphet, Johns, and Reller (1963) pointed out that in no other country do lay citizens have as much control over public schools as they do in America. According to McPhee (1967) the most important function of the lay public in effecting change in local school systems is to be certain that the members of the school board are highly qualified and competent people.

According to Morphet, Johns, and Reller (1963) the State Department of Education has leadership, regulatory, and operational responsibilities. McPhee (1967) indicated that to this time the State Departments of Education have played a modest role in effecting improvements in most local school districts. State Departments of Education have enforced minimum standards, administered regulations, distributed funds and performed other service functions. With few exceptions, the furnishing of stimulation and direction by state department personnel is more a hope than a reality. In many states these personnel are too few in number and are too over burdened with other duties to exert much leadership in effecting changes in local school systems.

The use of education faculties in colleges and universities to work with local school systems has become a common practice. McPhee (1967) minimized the influence that college and university faculties have had on school practice. As teachers of teachers they would appear to have a strategic position to influence future changes in the schools.

The control of professional associations by older members of the profession was cited by McPhee (1967) as the reason professional associations have had little influence in effecting change on local school

systems. He pointed out that professional conventions and other activities of professional associations do serve to acquaint members with new practices. The literature of professional associations often reveals how someone is doing something that is promising but most of the literature describes only the successes and ignores the failures.

According to Morphet, Johns and Reller (1963) the principal functions of the United States Office of Education are:

1. To collect and publish educational information
2. To engage in educational research
3. To provide educational leadership and consulting services
4. To cooperate with various state and local public and private educational agencies and institutions to promote the cause of education
5. To administer the Federal funds for education provided for the states and territories when the authority to do so is provided in the Appropriations Acts [p. 185].

McPhee (1967) pointed out that the United States Office of Education is clearly the most influential force on the education scene due to the sums of money it dispenses and the improved caliber of its professional staff. The emphasis of Title III funds administered by the United States Office of Education to stimulate changes in local school districts have had a lasting impact on local school systems.

In the past, textbook publishers have had a great effect on the curriculum in our schools because of the influence of the textbook on teacher planning. McPhee (1967) pointed out that this influence is changing due to the changing nature of instructional materials in the local school systems.

## Procedures Used to Facilitate Educational Change

Procedures used for facilitating educational change will be determined by the type of change desired. Morphet, Jesser, and Ludka (1971) pointed out that when educational leaders consider alternative

procedures for bringing about needed changes, they must keep in mind the kind of changes that are necessary in education. The three types of changes they identified were:

1. Changes in people
2. Changes in institutions and organizations
3. Changes in program or process [p. 125].

According to Miller (1967) educators too often do not develop specific strategies of change for specific types of innovation. He pointed out that it is obvious that overlapping does exist among the types of innovation in that team teaching, for example, is instructional and methodological as well as organizational. There are general procedures that can be used to facilitate educational change and specific procedures that can be used for specific types of change.

## General Procedures for Facilitating Educational Change

According to Haubrich (1968) our educational system is a hierarchical organizational system. Given the proposition that the educational system is hierarchical in nature with control of the system at the top, and that it corresponds to a highly organized bureaucratic structure, it is important to examine some of the general principles of organizational change that have come about in recent years. An underlying principle characterizing organizational change is that it occurs infrequently. However, change sometimes does occur within organizational structures and from these limited number of occurrences tentative generalizations have been made. Some of these generalizations refer to the nature of change vis-a-vis the many participants in the system. Others refer to the changes that can be expected within the administrative structure of an organization.

When discussing organizational change, Haubrich (1969) pointed out that there are some psychological principles that operate when change occurs. He indicated that the whole notion of expectations of individuals within an organizational pattern are absolutely critical to the question of whether change occurs or whether it does not. Changes which can be recorded when the individual is out of his own organizational situation do not have long term impact when the individual returns to the organizational setting.

A unique and peculiar relationship exists between conditions which facilitate change and the personality structure of teachers and/or administrators who are willing to accept the change. The improvement of school functionaries in a vertical pattern of training, which includes school personnel drawn from lowest to highest eschelon, would prove more feasible than grouping individuals by role or function. Programs of change must have continuing feedback to controlling forces. Changes contemplated by an educational system or those outside the system must be capable of institutionalization. Most important of all, someone has to be in charge.

According to McPhee (1967) there are certain procedures concerned with improvement that are universally applicable for local school systems. He listed the following steps as necessary procedures:

1. Planning for change
2. Staffing for change
3. Working with the incumbent staff
4. Travel [pp. 192-195].

Orr (1969) indicated that there are three distinct types of educational planning. They are:

1. Planning that occurs with adequate facts
2. Planning that occurs without facts
3. Planning that occurs without purpose, or planning for the sake of planning [p. 2].

In planning for change McPhee (1967) stated that the following steps should be included:

1. Anticipating the future needs and pressures
2. Locating and defining change requirements
3. Evaluating alternatives to achieve various objectives
4. Evaluating alternatives with respect to task achievement and cost
5. Determination of priorities
6. Allocation of resources
7. Evaluation and review [p. 193].

In staffing for change, McPhee (1967) indicated that the turnover in personnel provides an excellent opportunity for recruiting staff members who will assist in the process of improvement. The turnover in personnel could come about with natural shifts of teachers and administrators or the shifts could be directed toward purposeful improvement.

Effecting change in the local school system is facilitated by working with the incumbent staff. Chin (1967) pointed out that the different procedures for effecting change are geared for special users. Each user has different needs for different ways to bring about change as he sees them. McPhee (1967) indicated that one of the necessities of any program of change is to get the involvement of those that will be affected by the change.

According to Unruh and Turner (1970) travel has a broadening effect and tends to initiate change. Professional people and managerial staff members who have the opportunity of observing firsthand practices, methods and customs in other parts of the country generally become the innovators. McPhee (1967) felt that travel was a useful device for stimulating improvement and that it is a wise investment for anyone interested in change to arrange for superintendents, principals, and teachers to travel.

Albers (1967) suggested several bases on which teachers and administrators may be helped to reorient themselves to the need for change, to changes that are now underway, and to the changes in education that are ahead. He proposed:

1. Providing a full time district change agent
2. Building favorable attitudes and helping teachers keep informed
3. In-service education
4. A staff exchange program [pp. 198-201].

On an individual school level, Glines (1967) recommended guidelines for planning and effecting improvement. They are presented here in a logical order for implementation, and in a general context relating to the process of changing all the components in a school. They are:

1. Develop committed leadership
2. Critically review the literature
3. Evolve a philosophy
4. Create dissatisfaction with the inappropriate
5. Overcome the barriers
6. Arrange for models
7. Consider the budget
8. Select an alternative
9. Provide ongoing evaluation
10. Interpret developments and plan further improvements [pp. 166-175].

## Use of a Change Agent for Facilitating Educational Change

According to Albers (1967) school districts of sufficient size should establish one or more staff positions, the function of which would be to help to plan, promote and implement desired change. The change agent should work to establish a successful relationship with the client system.

After a successful relationship has been established between the change agent and client system, the change agent proceeds to the next step

of the planned change process. Lippitt (1958) referred to this next step as the "moving step" with three facets:

1. The clarification or diagnosis of client and system's problems
2. The examination of alternative routes and goals, establishing goals and intentions of action
3. The transformation of intentions into actual change efforts [pp. 38-39].

According to Hall (1971), in order to clarify or diagnose the client system's problem adequately, data must be collected and compiled concerning the client system. These data may be collected by change agent, outside groups or client system through testing, observations, interviews, questionnaires and outside informants. The important elements in this process are objectivity, reliability, and validity, with special attention given to the accuracy and relevancy of the information to the desired change. The change agent may diagnose collected information independently or cooperatively with client system and/or in cooperation with other agents or client systems. Regardless of the approach used, the change agent must not proceed on assumptions based on generalities. Such assumptions may encourage change agent to cut short its work and move rapidly in areas of active change efforts which may prove fatal to its process.

Once the information concerning the client system has been collected and analyzed, the machinery for actually making the change must be set in motion. Oftentimes change models are used as the working force in the planned change process. Taylor (1971) reports of three types of change models which may be used for the introduction of innovations in a client system. These are as follows:

> First, social interaction type that introduces innovations to a population whose needs are determined by the initiator.

> If the receiver reacts positively to the innovation, this starts a series of stages of acceptance or rejection.... Second, the research, development and diffusion type of model concentrates on changes from the perspective of the originator of an innovation who formulated his original problem on the basis of receiver needs.... The initiative... is taken by those other than the receiver who remains passive. Third...the problem-solver types of model is directed toward the involvement of the receiver in solving his own problem. Although the receiver may be able to create or find suitable solutions to his problem by himself, problem-solver models are primarily concerned with those cases in which outside resources are utilized [pp. 32-33].

Hall (1971) recommended that the change agent divide sub-parts of client system into "buzz" groups and allow each to suggest changes in the areas of identified problem. Once these are collected and tabulated, the results are presented to entire client system for consideration to refine, reject or accept. This type of involvement encourages self-improvement. Systematically, the change agent may canvass the field to see what techniques have been used in other client systems to solve similar problems, and may find it feasible to transplant a successful technique to an involved client system. Whatever techniques or course of action is taken, it is the change agent's responsibility to mobilize the acumen, personnel and whatever else is needed to do the job. The success of a change agent is measured by the way in which its plans and intentions are transformed into actual achievements.

An important aspect of managed change is the permanency of changes caused by such a system. Many times changes, introduced after much effort, cease to exist after the change agent has been removed. Therefore, it becomes imperative that the managed change process stabilizes whatever changes occur after the termination of change agent relationship. Many times this can be done if the changes are sufficiently publicized and others see the need to adopt them in their client systems.

Trump (1963) prescribed ten specific elements required in a carefully planned change in an educational client system. Of these, six dealt with public relations, such as preparing and distributing brochures, making speeches by knowledgeable people, giving demonstrations by teachers and students using mass media, issuing summary report of changes, and keeping staff members informed. Hall (1971) recommended that all planned changes should be evaluated in terms of the results sought and attained. If a change was initiated to improve the efficiency of something, then some system of evaluation should be included in the plan to see if this happened. If the results of this kind of evaluation are positive, they will stabilize the change and insure its permanency.

Hall (1971) proposed that after the change agent has diagnosed, caused, evaluated and stabilized the desired change in client system, it must have a technique of departing which will not interrupt effected change. It is desirable that the change agent not allow the client system to rely totally upon it during the change process. It should attempt to build into the permanent structure of client system a substitute for change agent which will continue the work of change agent after its departure. However, this does not mean a relationship should never exist between the two after the termination of active change efforts. This would depend upon how well the internal substitute had developed and the need of client system for continued external support. Sometimes this support may be dispensed through occasional consultation or examination.

According to Jung (1967) the functions of a change agent in a school system might be summarized as follows:

1. Relates to staffs of schools and to central administrators in identifying needs for and providing training
2. Provides demonstration of some skills
3. Trains staff in some skills
4. Makes support for training available (e.g., clerical help, released time)
5. Arranges staff access to other self-training resources (e.g., brings in trainers from outside for internal events, arranges involvement in outside training activities, provides materials for self-training)
6. Works to coordinate administration, research, and training as integrated parts of the system's problem solving procedures [p. 103].

Jung (1967) summarized the role of the change-agents role within the school system as follows:

1. Upper administrative responsibility with corresponding remuneration
2. Some large degree of autonomy in responding to expression of need and developing training experiences for personnel throughout the system
3. Clear and active lines of communication within the system to review: the place of training activities in relation to the system as a whole; problems that are met; results of training; modifications of the system which seem indicated as a result of integrated functioning of research and training efforts within the system
4. Team-working relationship with evaluators and researchers of the system
5. Source of referral to consultation and resource help from outside of the system [p. 103].

## Procedures Used to Facilitate Change in Instructional Programs

Procedures used to facilitate educational change in curriculum organization and content, instructional technology, staffing, school organization, and building design have many common factors and many unique factors. According to Miller (1967) it is obvious that overlapping does exist among the types of innovation and that a single or best strategy for implementing change has not yet been invented.

Rubin (1968) indicated the selection of a procedure for installing

a change is based upon three questions: (1) "What kind of a change is to be installed?" (2) "Who will engineer the installation?" and (3) "What conditions characterize the target environment?"

According to Rubin (1968) the process of installing innovations in a school requires three sequential operations, each involving a number of discrete steps. He identified the three operations as preliminary analysis, strategy selection, and action. Four steps are involved in preliminary analysis. They are:

1. Diagnosis of a weakness
2. Analysis of the responsible factors
3. Comparison of alternative correctives
4. Selection of the best corrective [pp. 159-160].

In considering strategy selection Rubin (1968) said:

> The most pervasive and damaging myth associated with innovation lies in the assumption that all innovations can be introduced in the same way. When one wishes to introduce an innovation in subject matter, one plays a different game from that played when one wishes to introduce an innovation in teaching method. Innovations in the organization of the school are still another game. Similarly, strategies for installing an innovation differ when the individual engineering the change is powerful and inside the organization, powerful and outside the organization, powerless and inside the organization, and powerless and outside the organization [pp. 160-161].

The action operation proposed by Rubin (1968) represents the culmination of the process of installing an innovation. There are seven steps in this operation:

1. Analysis of the innovation's requirements in training, materials, and linkage to existing system
2. Initiation of motivating pressures through inducing dissatisfaction and illuminating the rewards
3. Initiation of the influence strategy
4. Initiation of preparatory activities
5. Installing the innovation
6. Supporting the transition from old to new
7. Linking the innovation to the permanent system [pp. 161-162].

The purpose of these seven steps were given by Rubin in a parallel list:

1. The staff must understand the innovation, its requirements and its relation to the school's objectives
2. The benefits of the innovation must be clear
3. Specific strategies must be used to induce the staff to accept the innovation
4. A "getting ready" program must be provided
5. The innovation must be introduced
6. Various kinds of support must be provided in order to prevent premature, or transitional, failure
7. The innovation must be tied to the overall program [p. 162].

According to Alexander (1967) the following principles are most significant in effecting a curriculum-planning organization in any school system:

1. The organization should be genuinely representative of various units of the school system.
2. The organization should be small enough that effective discussion can take place, but sufficiently representative that each school faculty can have a direct personal liaison with a member of the central group. As a rough rule-of-thumb, it is suggested that a school district of some 25 or fewer school units have one council with a representative from each unit, and that larger districts arrange interlocking area councils, the areas generally being geographical, with each including a high school and its feeder schools.
3. The central council or committee should be the clearing house for all proposals for major curriculum change affecting more than one school. The organization should have the power to recommend changes to the school administration, as well as to individual units within the school system.
4. Any subgroups working within the organization should have definite times and places of meeting, preferably at the convenience of the group members.
5. The planning organization should be closely aligned with the administrative organization responsible for curriculum and instruction or some comparable agency. Frequently it is desirable for the director of curriculum and instruction to serve as chairman of the planning organization [pp. 354-355].

Lippitt (1966) identified these six phases of the curriculum change process:

1. New resources development
2. New resources distribution
3. New resources search
4. New resources adoption
5. New resources presentation
6. New resources utilization [p. 43].

Saylor and Alexander (1966) pointed out that in planning for change in curriculum organization and content an essential characteristic of the process is the cooperative performance of the leader. He listed these specific tasks of the leadership role:

1. Maintaining a comfortable environment
2. Secure frank, full expression of ideas
3. Summarize faithfully agreements or decisions reached and group progress from time to time
4. Help record keepers in the maintenance of adequate notes as to the flow and results of discussions
5. See that alternative courses of actions and positions on issues are identified
6. Determine the consensus when appropriate
7. Recognize fully the contributions of group members [p. 409].

Alexander (1967) proports a process for more rapid development of curriculum change. He indicated the process should have some method to identify curriculum needs, to determine curriculum priorities, to select innovations, to try out innovations, and diffuse innovations.

According to Evans (1954) the individual school is the most effective instrument for curriculum change. He saw the ideal principal as one who encouraged a staff attitude of inquiry, who provided security for those who attempted change, who saw that time and facilities were available for curriculum work, and who aided in the evaluation of any change undertaken.

In discussing the characteristics of organization and procedures for effecting curriculum change Passow (1954) felt that there are desirable aspects to the process. He recommended:

1. Widest possible participation in planning, testing, and evaluating by all persons - professional and lay - who are affected by policy and action decisions
2. Assignment of the individual school to a more central role in curriculum activity
3. Use of groups for initiating, planning, executing and coordinating improvement efforts
4. Fusion of supervision, in-service and curriculum

activity to concentrate personnel and process for the improvement of instruction
5. Experimentation with procedures and devices for more effective involvement
6. Extension of kinds and uses of consultative services from many sources - central office, state department, universities and colleges
7. Use of cooperative research in field situations for improving situations
8. Teamwork from many levels in cooperative enterprise
9. Development of more effective and widespread leadership [p. 221].

## III. PROCEDURES OF THE STUDY

The following procedures were used to carry out this study:

1. A review of the literature on the change process with an emphasis on educational change was conducted.
2. A panel, made up of the writer's doctoral committee, was used in identifying school systems that had made a change which was generally accepted as representing a desirable direction.
3. A tape-recorded interview with selected persons in six school systems who had been involved in a project where recognized change had occurred was completed.
4. A descriptive interpretation of this information was made to isolate procedures for facilitating educational change.

### Development of the Interview Guide

The design of the interview guide was determined by the type of information desired. The purpose of the study was to identify procedures used to facilitate educational change. An interview guide was designed to seek information concerning procedures used to facilitate educational change in local school systems where recognized change had occurred.

Using relevant elements discussed in the literature and the categories of barriers to educational change identified by Clemmons (1971), open or unrestricted types of questions were developed that would identify procedures used to facilitate educational change. The interview guide was field tested with an assistant superintendent of a school system

where educational change had occurred. This school system was not one of the six selected systems for the formal study. After the interview guide was field tested the guide was revised and used in the study.

## Selection of the School Systems

A panel, made up of the writer's doctoral dissertation committee, assisted the writer in identifying and selecting the school systems. Six Alabama school systems where recognizable educational change had occurred were selected. Four of the systems were city school systems and two were county school systems.

The criteria for the selection of the system were determined by the panel. A school system had to have made recognizable educational change in one of the following areas: curriculum organization and content, instructional technology, staffing, school organization or building design. Two of the school systems were in the early stages of implementing the change, two of the systems had implemented the change between one and two years prior to this study, and two of the school systems had implemented the change three or more years prior to this study. The name of the specific school system is eliminated for the sake of anonymity. From this point on, this summary refers to the respective school systems by the letters "A", "B", "C", "D", "E", and "F".

School system "A" had made a change from a traditional plan of school organization (6-3-3) to a plan which utilized the middle school concept (5-3-4). The change included a change in staffing, building design, curriculum organization and content, school organization, and instructional technology. The change in this system was financed primarily with local funds. Extensive planning was carried out over a four year period of time. Extensive travel and in-service programs for

teachers were a part of the overall readiness for the change program. The new middle schools were in their first year of operation.

The change in school system "B" was at the junior high school level in the area of curriculum organization and content. A Title III ESEA grant was being used to develop a new individualized approach to instruction in science and math. The project was in its first year of operation. Project participants were involved in in-service, travel and curriculum development.

In school system "C" a graded elementary school had made the change to a non-graded elementary school. Changes had occurred in the areas of staffing, building design, organization, and curriculum organization and content. Financing of the project was made possible through a combination of local, state, and federal funds. A Title III ESEA grant was received by the school system and this project was in its first year of operation. Teachers and project staff were involved in an in-service program which included curriculum development, travel and research.

School system "D" had made changes in staffing, building design, curriculum organization and content, and school organization. A new non-graded elementary school was built to accomplish these changes. The school was in its fifth year of operation and still had some members of the original staff. A year of intensive planning was done by the school system prior to the opening of the school. The planning project was financed by a Title III ESEA grant. During the planning year the project staff was involved in extensive research and travel. Title III funds were not available for operational aspects of the school. The planning staff for the new school became members of the faculty of the school at

the beginning of its first year of operation. New faculty members were carefully selected to join the original project staff. Extensive in-service activities continued during the initial stages of operation and an active in-service program still exists in the school.

The change made in school system "E" was primarily in the area of instructional technology. A model program had been developed featuring an extensive use of a variety of educational media in the instructional program. The program was developed for use in an elementary-junior high school which included grades 1 through 9. A Title III ESEA grant financed the project for three years. The project was in its fourth year of operation and federal funding through Title III had ended. Teachers and project staff had been through an extensive in-service program for the duration of the project. In the beginning stages of the project, teachers and project staff traveled to other school systems to visit projects featuring the use of educational media.

In School system "F" a traditional graded elementary school was changed to a non-graded elementary school. Changes were made in building design, staffing, curriculum organization and content and school organization. A new building was constructed to replace a building built in the early 1920's and to house the new program. There was almost a complete new staff in the new school. The curriculum in the new school featured an individualized approach in a multi-age grouping type of organization. The school was in its first year of operation. An in-service program was in operation featuring curriculum development, travel, and research.

## Selection of the Interviewees

Selection of the interviewees was made by the superintendent of the local school system. The writer, in his initial interview with the

superintendent, requested that the superintendent identify not more than five persons who had been involved significantly in the change in the school system.

Information was obtained from the interviewee concerning his role in the change. The interviewees included superintendents, assistant superintendents, principals, project directors, supervisors, and teachers. A description of the interviewees for each school system is presented in Chapter IV.

## Arranging the Interview

The writer, working with the superintendent of each school system, arranged to interview the selected participants of the study. A personal contact was made with the interviewee to explain the purpose of the interview and to arrange a time and place for the interview.

The interviews were held with the interviewees in their local school system in all but one case. An assistant superintendent of schools in one school system had moved to a new position out of state; therefore, special arrangements had to be made to interview him.

## The Interview

In the first part of the interview the researcher explained the purpose of the study, obtained personal data from the interviewee, and established rapport with the interviewee. Each interviewee was assured that his identity and the identity of his school system would remain anonymous. He was told that the interview would be tape recorded and that the tape recording of the interview was only to assure that a complete record of the interview was made.

## IV. SUMMARY OF THE FINDINGS AND CONCLUSIONS

### Summary of the Findings

This section presents a summary of the information found in this study. The summary is presented for the combined six school systems.

#### Interviewees of the Study

Interviewees in this study included superintendents of school systems, assistant superintendents of school systems, classroom teachers, principals, supervisors, project directors, and laymen. Table 1 presents the total number of interviewees that were used in this study. The interviewees are presented for each system according to positions held by the interviewee.

#### Nature of the Changes

Changes were identified as being made in the following areas in the six school systems: curriculum organization and content, instructional technology, staffing, school organization, and building design. Table 2 presents a summary of the types of changes identified as being made in each school system. Table 2 reveals that one school system made changes in five different areas, three school systems made changes in four areas, one school system made changes in three areas, and one system made a change in one area.

#### Reasons for Making Changes

Table 3 presents a summary of the reasons for making the changes in the six school systems. Table 3 reveals that the two most frequently

TABLE 1

TOTAL NUMBER OF INTERVIEWEES IN THE STUDY
BY SYSTEM AND POSITION

| Position | System and Number of Respondents | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| Superintendents and assistant superintendents | 2 | 2 | 1 | 1 | 2 | 2 | 10 |
| Classroom teachers | 1 | 1 | 2 | 2 | 2 | 1 | 9 |
| Supervisors | 1 | 0 | 1 | 0 | 1 | 1 | 4 |
| Principals | 1 | 0 | 1 | 0 | 0 | 1 | 3 |
| Project directors | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| Laymen | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 5 | 5 | 5 | 4 | 5 | 5 | 29 |

TABLE 2

SUMMARY OF THE TYPES OF CHANGES
MADE IN EACH SCHOOL SYSTEM

| Types of Changes | System | | | | | |
|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" |
| Curriculum organization and content | X | X | X | X | | X |
| Instructional technology | X | | | | X | |
| Staffing | X | X | X | X | | X |
| School organization | X | | X | X | | X |
| Building design | X | X | X | X | | X |

TABLE 3

REASONS FOR MAKING THE CHANGES IN THE SIX SELECTED SCHOOL SYSTEMS

| Reasons | System and Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| To better meet needs of students | - | 4 | 5 | 3 | 5 | - | 17 |
| Need for new buildings | 5 | - | - | 4 | - | 5 | 14 |
| Better instructional organization | 3 | - | 3 | - | - | 4 | 9 |
| Need for model school or place to try new innovations | - | - | - | - | 5 | 4 | 9 |
| Community pressure | - | 4 | 2 | - | - | - | 6 |
| Change in zoning patterns | 1 | 3 | - | - | - | - | 4 |
| Federal funding available | - | 2 | - | - | - | - | 2 |
| Influence of accreditation | - | - | 2 | - | - | - | 2 |

identified reasons for change centered around a need for a program that would better meet the needs of students and a need for new buildings.

### Nature of Leadership for the Changes

A wide range of persons were identified as providing leadership in initiating and implementing the changes in the six school systems. Table 4 reveals that the leadership which was most frequently identified by the respondents was from the top level of the system organization.

### Procedures Used to Obtain Cooperation

Table 5 reveals that a variety of procedures were used to obtain the cooperation of all persons in the systems. Procedures which were most frequently identified by the respondents included the leadership of the superintendent and his staff, in-service education activities, and the use of consultants.

### Procedures Used to Improve Attitudes of Teachers

A wide range of procedures were identified by the respondents as being used to improve teacher attitudes. Table 6 reveals that those procedures most frequently identified were in-service education activities, institutes or summer workshops, travel, released teacher time for planning, and use of consultants.

### Procedures Used to Increase the Knowledge of Teachers

Table 7 reveals that in-service education activities, use of consultants, and travel were the most frequently identified procedures used to increase teachers' knowledge in areas related to the changes.

TABLE 4

NATURE OF THE LEADERSHIP FOR THE CHANGES IN EACH SCHOOL SYSTEM

| Nature of Leadership | System and Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| Superintendent | 5 | - | 5 | 4 | - | 5 | 19 |
| Assistant superintendent | 5 | 5 | - | 4 | - | 5 | 19 |
| Principal | - | - | 5 | 4 | 5 | 2 | 16 |
| Project director | - | 5 | - | - | 5 | 4 | 14 |
| Former superintendent | 5 | - | - | - | 5 | - | 10 |
| Supervisor | 5 | - | - | - | - | - | 5 |
| Consultant | - | - | - | - | - | 5 | 5 |
| School board | - | - | - | 4 | - | - | 4 |

TABLE 5

SUMMARY OF THE PROCEDURES USED TO OBTAIN THE COOPERATION OF ALL PERSONS IN THE ORGANIZATION IN THE SIX SCHOOL SYSTEMS

| Procedures | System and Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| Leadership of superintendent and staff | 5 | - | 4 | - | 5 | 4 | 18 |
| In-service education | 5 | 5 | - | 3 | - | 4 | 17 |
| Use of consultants | 4 | 3 | - | - | 3 | 5 | 16 |
| Released teacher time for planning | 4 | - | 3 | 3 | - | - | 11 |
| Travel | 3 | - | - | 3 | 3 | - | 9 |
| Leadership of principal | - | - | 4 | - | 4 | - | 8 |
| Cooperative planning | - | - | - | 4 | 4 | - | 8 |
| Leadership of project director | - | 4 | - | - | - | - | 4 |
| Leadership of assistant superintendent | - | 4 | - | - | - | - | 4 |
| Involving wide range of personnel in planning | - | - | - | - | 4 | - | 4 |
| Leadership of federal project staff | - | - | - | - | 4 | - | 4 |
| Provision of time and money for planning | 3 | - | - | - | - | - | 3 |
| Meetings with lay groups | 1 | - | - | - | - | - | 1 |

TABLE 6

PROCEDURES USED TO IMPROVE TEACHERS' ATTITUDES
TOWARD THE CHANGES IN THE SIX SCHOOL SYSTEMS

| Procedures | System and Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| In-service education activities | 5 | 5 | 5 | 4 | 5 | 4 | 28 |
| Institutes or summer workshops | 5 | 4 | - | 3 | 5 | 3 | 20 |
| Travel | 4 | - | 4 | 3 | 3 | 4 | 18 |
| Released teacher time for planning | 3 | 3 | - | 4 | 3 | - | 13 |
| Use of consultants | - | 3 | 3 | - | 4 | - | 10 |
| Faculty meetings | - | - | 5 | - | - | - | 5 |
| University training | 4 | - | - | - | - | - | 4 |
| Saturday workshops | - | 4 | - | - | - | - | 4 |
| Leadership of project staff | - | - | - | - | 3 | - | 3 |
| Stipends for teachers | - | - | - | - | 3 | - | 3 |
| Transfers, dismissals, retirements | - | - | - | - | - | 3 | 3 |
| Open communications within faculty | - | - | - | 2 | - | - | 2 |
| Individual conferences with principal | - | - | 2 | - | - | - | 2 |
| Use of professional library | - | - | 2 | - | - | - | 2 |
| Use of paraprofessionals | - | 2 | - | - | - | - | 2 |
| Use of new materials or equipment | - | 2 | - | - | - | - | 2 |
| Selective staffing | - | - | - | - | - | 2 | 2 |

TABLE 7

PROCEDURES USED TO INCREASE TEACHERS' KNOWLEDGE IN AREAS RELATED TO THE CHANGES IN THE SIX SELECTED SCHOOL SYSTEMS

| Procedures | System and Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| In-service education activities | 5 | 5 | 5 | 4 | 5 | 8 | 32 |
| Use of consultants | 4 | 4 | 3 | 3 | 4 | 4 | 22 |
| Travel | 4 | 1 | 4 | 4 | 4 | 4 | 21 |
| Reading in professional publications | 4 | - | 3 | 4 | 3 | 2 | 16 |
| Individual study and experimentation | - | 4 | 3 | - | - | - | 7 |
| Other | - | - | 3 | - | 2 | 4 | 9 |

## Procedures Used to Gain Community Support for the Changes

A number of procedures were used in the six school systems to gain community support for the changes. Table 8 reveals that parent teacher association meetings, small group meetings with parents, use of the news media, and visitation by the parents to the school were the most frequently identified procedures which were used to gain community support.

TABLE 8

PROCEDURES USED TO GAIN COMMUNITY SUPPORT FOR THE CHANGES IN THE SIX SELECTED SCHOOL SYSTEMS

| Procedures | System and Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" | Total |
| Parent-teacher association meetings | 3 | 4 | 5 | 4 | 5 | 5 | 26 |
| Small group meetings with parents | 5 | - | 5 | 4 | 4 | 5 | 23 |
| Use of news media | 4 | 5 | 4 | 3 | - | 4 | 20 |
| Visitation by parents to the school | 4 | - | - | - | 4 | 6 | 14 |
| Speeches to civic clubs | 5 | 4 | 4 | - | - | - | 13 |
| Parent-teacher conferences | 3 | - | 4 | 3 | 2 | - | 12 |
| Student related activities | - | - | 3 | - | 4 | - | 7 |
| Use of parents as para-professional aides | 2 | 1 | - | - | - | 3 | 6 |
| Use of brochures about project | 3 | 2 | - | - | - | - | 5 |
| Local school newsletter | - | - | - | 2 | 2 | - | 4 |
| Project advisory committee | - | 3 | - | - | - | - | 3 |
| School board meetings | - | 1 | - | - | - | - | 1 |

## Characteristics of the School Systems

Several common characteristics were found among the school systems used in this study.

### Size

All of the school systems that were used in this study had less than twelve thousand students. Four of the school systems were considered to be small systems with less than three thousand students. One of the systems had approximately ten thousand students and one system had slightly over eleven thousand students.

### Financial Factors

The per pupil expenditure in all but one system was greater than the state average per pupil expenditure. Additional federal support was provided to all of the school systems in which educational changes occurred. Extensive use of Title III funds was made in four of the six school systems and Title III funds were also used to some extent in the change project in one system. Title 45 funds were used in two of the systems to help finance the change. One of the school systems had made extensive use of local funds to help finance the change.

### Method of Selection of Superintendents and School Boards

All of the superintendents in the school systems in this study were appointed to their positions by the local boards of education. Four of the six boards of education were appointed by the city governing bodies. Two of the school boards were elected by the voters in their county.

### Origin of the Idea for the Change

The origin of the idea for the change was initiated at the top administrative level in the six school systems. The superintendents or the assistant superintendents were considered to have initiated the idea for the change based on the identified needs in their school systems.

### Cooperative Planning

All of the schools' systems used some method of cooperative planning in implementing the various changes. Efforts were made to bring together persons in the systems who were concerned with the changes to participate in the planning at various levels. Persons who were identified as being a part of the cooperative planning included superintendents, assistant superintendents, supervisors, principals, teachers, board members, laymen, and consultants.

### Use of Consultants

Educational consultants from outside the school system were used in all of the systems in planning and implementing the changes. All of the systems considered the consultants as being genuinely helpful in planning and implementing the changes.

## Leadership Factors Influencing the Change

Common factors related to leadership were identified in all of the school systems.

### Direction of the Change

All of the educational changes which occurred were initiated at or near the top level in the system organization. It was felt that this was the best way in which the changes that occurred could have been

brought about. The leadership and support of the educational leaders were considered as important factors in initiating and implementing the changes in all of the systems.

### Procedures Used to Gain Cooperation

In all of the systems the leaders of the school system made an effort to gain the cooperation of all persons concerned with the change. Factors which were identified in all systems which increased the cooperation of persons concerned with the change project included staff development programs, leadership of superintendents, travel, and released teacher time for planning.

### Areas of Leadership by the Superintendents

Leadership of the superintendents was in three basic areas: leadership in securing financial resources to finance the project, leadership in organizing a staff development program for the project, and leadership in obtaining and increasing community support for the project.

In each system the superintendent was identified as the person who was responsible for securing the financial resources for the change projects. In all of the systems the superintendents used their staff members to assist in writing proposals to secure additional federal funds to help finance the change. Only one system made any effort to obtain extensive local financial support for the change.

Superintendents in all of the systems provided leadership in organizing staff development programs to assist the school systems in making effective change. The staff development programs were organized in areas related to specific change projects.

All of the superintendents were responsible for organizing a program to seek community support for the change. Superintendents delegated much of this responsibility to other persons concerned with the change projects.

### Improvement of Leadership

In all of the six systems included in the study there was some effort made to improve the leadership capabilities of the leaders of the change project. The leaders participated in staff development programs, traveled to innovative change projects that were related to their projects, and were able to employ consultants to assist in the planning and implementation of the changes.

## Factors Related to the Attitudes and Knowledge of Teachers

Common factors related to the attitudes and knowledge of teachers were identified in all of the school systems.

### Attitudes of Teachers at the Beginning of the Change

Teachers in all systems were identified as being supportive but apprehensive about the change projects. Terms which were used to describe the attitudes of the teachers included: anxious, skeptical, insecure, and hesitant. The reason for these attitudes centered around teachers' lack of knowledge about the change.

### Procedures Used to Improve Attitudes of Teachers

All of the systems in which changes occurred established as a part of their overall staff development a program to improve the attitudes

of teachers. Among the procedures that were identified in all systems as ways in which attitudes of teachers were changed were: in-service activities which were related to the changes, travel by teachers to visit innovative projects similar to their project, time for teachers to participate in planning activities related to the project, selective staffing, professional reading by teachers in areas related to the change, and use of consultants to work with teachers in changing attitudes.

### Knowledge of Teachers About the Change at the Beginning of the Change

In all of the school systems where change occurred it was felt that teachers had a varied knowledge initially about the change. There seemed to be a wide range of competencies among the teachers in the various school systems at the beginning of the projects.

### Procedures Used to Increase Teachers' Knowledge

As a part of the overall staff development program related to each project, each school system provided a program designed to increase the knowledge of teachers in areas related to the change. Three basic procedures were organized to achieve this purpose: in-service education activities related to the project, travel to innovative projects of a similar nature to the project in the local school system making the change, and use of consultants in the staff development program.

## Community Related Factors Influencing Educational Change

Common factors related to community factors which influenced the change were identified in all of the systems.

### Initial Community Attitudes Toward the Changes

Community support for the change was identified as being favorable in all of the systems in the initial stages of the changes. Two basic factors were identified as the reasons for this support: there were no additional taxes placed upon the communities to support the changes and the local school system initiated a program to gain community support for the change.

### Procedures Used in Gaining and Increasing Community Support for the Changes

Each of the school systems initiated an information dissemination program in which common procedures were utilized. Meetings with parents, speeches by project leaders to community groups, use of local news media, visitation by parents to the school, and use of project newsletters were procedures that were used to obtain and increase support for the projects.

## Conclusions

The findings in this study led to certain conclusions regarding procedures used to facilitate educational change:

1. Changes in school systems are initiated at the top level or near the top level of the system organization. Respondents of the study identified top level persons in the system organization who were responsible for initiating the change.
2. The leadership of the superintendent of schools is a major factor in facilitating educational change. Respondents of the study indicated that the changes which occurred in their system could not have occurred without the support and leadership of the superintendent.

3. Federal financial support to local school systems promotes educational change. Respondents of the study indicated that the additional federal funds were responsible for bringing about educational change.
4. There seemed to be general agreement that when federal funds were used to finance the change there was less need to gain community support for the change. Respondents of the study indicated that when federal funds were used there was less effort made to gain community support for the project.
5. When federal funds are used to finance projects in local school systems, efforts which are made to gain community support for the project are directed toward program support rather than financial support. Respondents of this study indicated that procedures which were used to gain community support for the project were made to gain support for the program changes which were being made and not to gain financial support.
6. Common procedures are used for facilitating various types of educational change. The respondents in this study identified many common procedures for facilitating educational change in curriculum organization and content, building design, instructional technology, staffing, and school organization.
7. Many of the same procedures are used for both improving the attitudes of teachers and increasing the teachers' knowledge base in areas related to the change. The respondents of the study identified many common factors that were used for both purposes.
8. Educational consultants serve as facilitators of educational change. Respondents of the study felt that consultants were extremely helpful in changing the attitudes of teachers about the project and

providing teachers with a knowledge of changes related to the project.

9. There seems to be general agreement by the superintendent of schools and persons selected by the superintendent concerning the procedures used to facilitate educational change. Respondents who were selected by the superintendent were in general agreement with the superintendent concerning procedures used to facilitate educational change.

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